

**WE CLAIM:**

1. Device (1) for wafer inspection with a stage (2) that is displaceable in two directions  
5 (X,Y) that are perpendicular to one another and onto which is placed the wafer (25) to be inspected, the stage (2) being air-cushioned and being provided with several air nozzles (12, 14), characterized in that there is provided at least one valve (29) connected with at least one electric control unit (27) and that the valve (29) is configured so that normal pressure prevails in the air nozzles (12, 14) when the electric control unit (27) delivers a corresponding signal.  
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2. Device (1) as defined in claim 1, characterized in that the signal is triggered by a drop in potential.
3. Device (1) as defined in claim 1, characterized in that the signal is triggered by an  
15 emergency shut-down.
4. Device (1) as defined in claim 1, characterized in that the signal is triggered by a failure of the software.
- 20 5. Device (1) as defined in one of claims 1 to 4, characterized in that there is provided a first and a second electric drive (4, 6) for the purpose of moving the stage (2) along the two directions (X, Y) that are perpendicular to one another.
6. Device (1) as defined in one of claims 1 to 5, characterized in that the first and the  
25 second electric drive (4, 6) are linear motors.
7. Device (1) as defined in claim 6, characterized in that parallel to the first linear motor there is disposed at least one first track (8) which cooperates with a multitude of air nozzles (12), the compressed air emerging through air nozzles (12) thus forming an air bearing for the  
30 (X) direction.
8. Device (1) as defined in claim 6, characterized in that parallel to the second linear motor there is disposed at least one second track (10) that cooperates with a multitude of air nozzles

(14), the compressed air emerging through air nozzles (14) thus forming an air bearing for the (Y) direction.

9. Device (1) as defined in claim 1, characterized in that when the valve (29) is open,  
5 normal pressure prevails in the air nozzles (12, 14) so that the stage (2) with the air nozzles (12, 14) rests on the first and second track (8, 10), the position the stage (2) occupied during the generation of the signal thus being determined.

10. Device (1) as defined in one of claims 1 to 9, characterized in that the stage (2) is  
10 provided with a receptacle (20) for the wafer (25) to be inspected.

11. Device (1) as defined in one of claims 1 to 10, characterized in that the stage (2), the  
15 linear motors, the corresponding air nozzles (12, 14) for a first and a second stage element (2a, 2b), at least one control unit (27), air supply lines (32) and electric lines (34) are disposed in a housing.

12. Device (1) as defined in claim 1, characterized in that the valve (29) is provided on the  
20 air nozzle (12, 14) itself.

13. Device (1) as defined in claim 1, characterized in that the valve (29) is provided in at  
20 least one air supply line (34).